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## DEPOSITION OF PREM S. SINGH -- 11/28/01

1 It's a completely different reaction mechanism and  
2 kinetics.

3 Q Do the claims call for any of that?

4 A Well, claim calls for pyrolysis golden  
5 brown products which are the results of that process.

6 Q So is it now your testimony that your  
7 conception in 1988 did not include the use of a  
8 liquid pyrolysis product?

9 A Ask again, please.

10 Q Is it now your testimony that your  
11 conception in 1988 did not include the use of a  
12 liquid pyrolysis product?

13 A '88 was not a liquid pyrolysis product.

14 Q And it's also your testimony that your  
15 conception in 1988 did not involve the golden  
16 browning of any product?

17 A There was no definition of golden  
18 browning.

19 Q Just so we can confirm, you testified  
20 that the shrinkage obtained or resulting from the use  
21 of the Enersyst system was in the range of from about  
22 2 to 3 percent; is that correct?

23 A That's correct.

PTO-003400

24 Q You testified that the inlet temperature

## DEPOSITION OF PREM S. SINGH -- 11/28/01

1                   We have a -- right now we have  
2     equipment where we are testing it may take four or  
3     five months because it's not just plug it in, run the  
4     product, then you're done. Then you have to evaluate  
5     the products chemically, you know, microbiologically,  
6     sensory. So it's not just looking the oven and just  
7     run the test. It's not atypical to run the test for  
8     four or five months.

9           Q       What were the results of these tests?

10          A       It was complete failure from the  
11     objective that was described to us.

12          Q       And what objective was that?

13          A       That you can brown the product without  
14     any coating on it.

15          Q       What about the other tests that you  
16     conducted? What were the results?

17          A       Well, the natural smoke that we hooked up  
18     in there, that produced somewhat acceptable product.

19          Q       What about the liquid smoke Maillose  
20     tests?

21          A       It was somewhat, again, successful.

22          Q       Were any evaluations done of the product  
23     produced using liquid smoke and/or Maillose?

24          A       Say it again.

PTO-003401

1 UNITED STATES DISTRICT COURT

2 WESTERN DISTRICT OF OKLAHOMA

3 UNITHERM FOOD SYSTEMS, INC., )

4 an Illinois corporation, and )

5 JENNIE-O-FOODS, INC., a )

6 Minnesota corporation, )

7 Plaintiffs, )

8 vs. ) No. CIV 01-347-C

9 SWIFT-ECKRICH, INC., d/b/a )

10 CONAGRA REFRIGERATED FOODS, )

11 a Delaware corporation, )

12 Defendant. )

13  
14 THIS DEPOSITION CONTAINS CONFIDENTIAL

15 ATTORNEYS' EYES ONLY MATERIAL

16  
17 The continued deposition of CHRISTOPHER  
18 SALM, called for examination, taken before GAIL  
19 LIVIGNI, a Notary Public within and for the County  
20 of Will, State of Illinois, and a Certified  
21 Shorthand Reporter of said state, at Suite 200, 184  
22 Schuman Boulevard, Naperville, Illinois, taken on  
23 the 13th day of February, A.D., 2002, at 9:00  
24 o'clock a.m.

ORIGINAL

PTO-003402

1 Patent?

2 A. I don't know if the Jonesboro plant is  
3 using the Hunter color system as a quality check or  
4 if we gave them color chips. Most times what we do  
5 with the plant is we give them color reference  
6 chips.

7 Q. What do you mean by color chips? I mean  
8 a piece of product, or what are you talking about?

9 A. It can either be a photograph, or it can  
10 be a painted --

11 Q. Just like a paint swatch when you're  
12 painting your house?

13 A. Yes.

14 Q. Okay. So, you know, you don't have to  
15 have this wand to produce a product that falls  
16 within the claims of that '027 Patent, correct?

17 A. That is correct.

18 Q. Okay. You're lawyer yesterday asked  
19 Mr. Hussain a technical question about having this  
20 Hunter wand and how the values have to match up,  
21 the color values match up to that wand, but you  
22 don't use the wand to match the colors to the  
23 product produced by the '027 Patent, correct?

24 A. We use the wand to determine the color

1           A.     Based on everything that I know, I  
2 believe that he did.

3           Q.     Okay. Now, with respect to liquid smoke  
4 application, is it your testimony, I take it, that  
5 Prem Singh shared that he had more expertise with  
6 respect to liquid smoke application than Red Arrow  
7 in 1990?

8           A.     With respect to liquid smoke  
9 application?

10          Q.     Yes.

11          A.     I believe so.

12          Q.     Okay. And when is the next time Conagra  
13 shared information as set forth in the '027 Patent  
14 with Red Arrow, if you know?

15          A.     I know in 1997, we defined the color  
16 objective.

17          Q.     The color objective for what product?

18          A.     For the whole muscle turkey breast.

19          Q.     And when you say defined color  
20 objective, you mean the Golden Brown color which is  
21 set forth in the '027 Patent?

22          A.     Yes.

23          Q.     And that's how you define the color  
24 objective as being Golden Brown?



1 A. Yes.

2 Q. Any other way you define that color  
3 objective?

4 A. What do you mean?

5 Q. Well, I mean so you just told Red Arrow  
6 the color objective that we are attempting to  
7 achieve, I assume, with this new process that we  
8 are developing is Golden Brown color, is that fair  
9 to say?

10 A. We told them that it was Golden Brown  
11 color. We showed them examples of Golden Brown,  
12 and we showed them pictures that would represent  
13 something close to Golden Brown.

14 Q. These examples of Golden Brown, was this  
15 from product that was produced by Conagra or  
16 product that was produced using other company's  
17 ovens?

18 A. It was product that was produced by  
19 Conagra.

20 Q. Where?

21 A. In our test kitchen.

22 Q. Where?

23 A. At Downers Grove.

24 Q. Using what oven?

1 Q. I understand that. But I'm talking  
2 about obtaining the Golden Brown color for the  
3 whole muscle meat product as set out in the claims  
4 in the '027 Patent, is it your testimony here today  
5 that that was Prem's idea to use a convection oven?

6 A. Yes.

7 Q. And when did he come up with that idea,  
8 do you know?

9 A. It was 1989, 1990-ish.

10 Q. Okay. That's what he's told you,  
11 correct?

12 A. Yes.

13 Q. Any other information that Conagra  
14 shared with Red Arrow prior to the filing of the  
15 patent?

16 A. No.

17 Q. What about Unitherm, what information  
18 was shared with Unitherm -- I'm sorry, go ahead,  
19 there was a question pending.

20 A. We shared the color objective with  
21 Unitherm.

22 Q. When was that --

23 A. That was in --

24 Q. -- objective disclosed?



- 1 A. February of 1998.
- 2 Q. Anything else?
- 3 A. I'm not sure.
- 4 Q. Well, I want you to be sure.
- 5 A. Right.
- 6 Q. If you need to look at the patent, then
- 7 you go ahead and look at the patent, but I want you
- 8 to be sure if there is any other information that
- 9 you shared with Unitherm that's disclosed in the
- 10 patent prior to the filing of the patent.
- 11 A. Right. I don't know that we shared
- 12 anything else.
- 13 Q. Other than color objective?
- 14 A. I know we shared color objective with
- 15 them.
- 16 Q. Right. And that was the Golden Brown?
- 17 A. Right, because I was there when that
- 18 happened.
- 19 Q. Did you have one of these Hunter wands
- 20 with you when you disclosed the color objective in
- 21 February?
- 22 A. Actually we showed them a picture.
- 23 Q. Picture of a piece of product?
- 24 A. Yes.

PTO-003407

1 Q. Okay. Was this the picture from the  
2 General Electric oven product produced from the  
3 General Electric oven?

4 A. Or other similar type oven.

5 Q. And you're looking at the patent right  
6 now, so I don't want to interrupt you. I just want  
7 to make sure that there is nothing else that you  
8 disclosed to them.

9 A. I believe that was it.

10 Q. Who was present when you disclosed the  
11 color objective to Unitherm?

12 A. I know that David Howard was present,  
13 and I know that Prem Singh was present, and I know  
14 that Chad Anderson was present.

15 Q. And this was disclosed to Unitherm  
16 through David Howard in February of 1998 when you  
17 visited the Unitherm facility in Ponca City?

18 A. Yes.

19 Q. Was Jim Wade present?

20 A. I don't recall that.

21 Q. What about the Heat & Control, you're  
22 not sure whether you disclosed any of this  
23 information to them?

24 A. I wasn't at the Heat & Control testing.

PTO-003408

1       they keep those there at the plant?

2           A.     Yes.

3           Q.     In order to ensure this Golden Brown?

4           A.     Yes.

5           Q.     And that product is made from one or  
6 more of the claims as set forth in the '027 Patent?

7           A.     Yes.

8           MR. CASTRO: We haven't seen those color  
9 chips, Bob, the color chip or the photographs, and  
10 I think they would be responsive to our --

11          MR. SCHROEDER: We will look into that. I  
12 certainly wouldn't have considered the color chip  
13 to be a document anymore so than the equipment  
14 itself would be produced.

15          MR. CASTRO: But the photograph.

16          MR. SCHROEDER: Well, we'll look into the  
17 photographs.

18 BY MR. CASTRO:

19          Q.     So when you moved the slice and serve to  
20 the Jonesboro plant, what's the process that  
21 produces that product now? You said it was a --  
22 initially an Alkar oven?

23          A.     Yes. I believe this is how they do it.  
24 I haven't been at the plant since we moved that

PTO-003409

1 product there. We have a dip, that's a caramel  
2 dip, that the product goes into. And then at that  
3 time, I believe it was put back on racks and dried  
4 and then packaged, cut and packaged.

5 Q. When you came up with this objective in  
6 1998, why the Golden Brown color? This color  
7 objective in '97, I guess, is when you came up with  
8 it?

9 A. It was 1997.

10 Q. '97.

11 A. The objective was set off of a  
12 Butterball Thanksgiving turkey as it came out of  
13 the oven, and so that in effect defined the Golden  
14 Brown that we were looking for. The "why" did we  
15 come up with it?

16 Q. Yes.

17 A. Our marketing group did a marketplace  
18 study and evaluated products in the marketplace  
19 against our white product, products like the Sara  
20 Lee product and the Boar's Head product.

21 Q. Jennie-O product?

22 A. No.

23 Q. No Jennie-O product?

24 A. Not that I recall. There was another

PTO-003410

1 Q. And for you, you wanted to achieve an  
2 oven roasted look, correct?

3 A. What we wanted to achieve was a look  
4 that looked like a Butterball Thanksgiving turkey  
5 when you first bring it out of the oven.

6 Q. Butterball oven roasted, how's that? Is  
7 that what you were trying to achieve? You just  
8 said a Butterball turkey just out of the oven.

9 A. The reason we didn't characterize it as  
10 oven roasted was because we had an oven roasted  
11 product in the marketplace that was white, and so  
12 we wanted to make sure that we differentiated.

13 Q. I understand. The only reason you  
14 didn't call it oven roasted is because you already  
15 had an oven roasted product that was white,  
16 correct?

17 A. And the golden oven roasted really  
18 depicted what we had in mind for the product.

19 Q. What color is a Butterball whole turkey  
20 when it comes out of the oven?

21 A. It's pretty close to a golden brown.

22 Q. That's what I thought.

23 A. Have you cooked one?

24 Q. Yes, I have tried. The existing product

1 A. That is true.

2 Q. And then they also had a proposal and a  
3 price quote for the oven, correct?

4 A. That is correct.

5 Q. Those two items could produce a golden  
6 brown product, correct?

7 A. I didn't say that.

8 Q. You saw the golden brown product  
9 produced in 1993 during the testing?

10 A. At Unitherm?

11 Q. Yes.

12 A. I don't know if I characterized it as a  
13 golden brown color. I don't recall saying that I  
14 characterized it as a golden brown color.

15 Q. Was that a golden brown color?

16 A. It's a brown color.

17 Q. That must be a term of art akin to  
18 patent law.

19 MR. SCHROEDER: Golden brown?

20 BY MR. CASTRO:

21 Q. In fact, you mixed caramel and Maillose,  
22 didn't you? Here is a memo, No. 19. That's a  
23 December 29, 1993 memo from you to others including  
24 Prem Singh regarding a trip report at Wells plant,



1 MR. SCHROEDER: You think or --

2 MR. CASTRO: No, I pass the witness.

3 EXAMINATION

4 BY MR. SCHROEDER:

5 Q. Okay, just a few quick questions. With  
6 reference to Exhibit 1, which is the Prem Singh  
7 patent, you notice that starting with column five  
8 of this patent, we have a series of examples, and  
9 as to each example, the patent identifies a color  
10 in terms of LAB values. Do you see that?

11 A. Right.

12 Q. Are you able to translate those LAB  
13 values mentally into colors?

14 A. No, I cannot.

15 Q. Are you able to make a comparison, based  
16 on this patent, without having equipment available  
17 to you, between colors identified in this patent  
18 and the colors that you would choose when you were  
19 using Maillose?

20 A. I cannot.

21 Q. Do you know whether you ever achieved a  
22 golden brown color in the sense in which that term  
23 golden brown is used in the context of this patent?

24 A. No, I don't know.

PTO-003398

1 Q. Now, how did you do that with regards to  
2 this '027 Patent?

3 A. We did it a couple of ways. As I  
4 mentioned, we tried to determine based on what we  
5 could see in the marketplace and then we did a  
6 literature search.

7 Q. What do you mean what you could see?  
8 Did you go to plants, to facilities to see what  
9 kind of process they were running?

10 A. No, no.

11 Q. What do you mean by that?

12 A. Well, we went into the marketplace and  
13 we tried to find products that would be similar to  
14 this golden oven prepared product oven roasted  
15 product of ours.

16 Q. And you found those products, right?

17 A. Did not.

18 Q. Well, you don't know how those products  
19 were prepared, do you?

20 A. I didn't see anything that looked like  
21 our product.

22 Q. So if something is prepared identically  
23 to how you've laid it out in the patent but it  
24 doesn't produce a golden brown product, then it

PTO-003412



1 doesn't infringe your patent?

2 A. I would say that's correct.

3 Q. Okay. So it all depends upon the color  
4 of the product, the finished product, after you  
5 follow the claims set forth in the '027 Patent?

6 A. Yes.

7 Q. Is it your testimony today that your  
8 competitors, none of your competitors, had a  
9 product similar in color to the product you  
10 produced in 1999 using the '027 Patent?

11 A. In 1998?

12 Q. Okay, '98.

13 A. Yes.

14 Q. None of them had a golden brown color?

15 A. Yes.

16 Q. Yes, none of them did?

17 A. Yes, none of them did.

18 Q. Okay. Who did that? Who did that  
19 sensory -- would you call it sensory testing  
20 because I mean it's a visual, you're looking at the  
21 color of the product? Who performed that visual  
22 inspection? Was that done by the marketing people  
23 or who?

24 A. No. There were a number of people that

PTO-003413

1 were involved in that.

2 Q. Name them.

3 A. I know that Prem Singh was involved in  
4 that. I know that I was involved in that. I know  
5 that Rich Scalise was involved in that, and I  
6 believe that Rich Scalise asked his salespeople in  
7 the field.

8 Q. What was your involvement in trying to  
9 see whether there was other product that looked  
10 golden brown? What did you do?

11 A. I looked at deli cases in the  
12 marketplace.

13 Q. You literally went to -- what kind of  
14 stores do you got up here? What did you go to,  
15 like grocery stores?

16 A. We have grocery stores that go by the  
17 name of Jewel and Dominicks.

18 Q. Okay. So you walked into these -- you  
19 yourself walked into these grocery stores and  
20 looked behind the casing, behind the glass case?

21 A. Yes.

22 Q. To see whether anyone had a golden brown  
23 product?

24 A. Yes.

PTO-003414

1 Q. Hey, what if someone said this does come  
2 close? Don't you think it would be good to keep  
3 those records to prove to them that before you  
4 filed your patent, that you could say that they  
5 didn't come within these examples anyway?

6 A. Are you asking my opinion?

7 Q. Yes.

8 A. I didn't think of it at the time.

9 Q. You didn't run one of those Hunter wands  
10 at the deli counters, did you?

11 A. No.

12 Q. Do you know if Prem did? Did he take  
13 one with him?

14 A. No.

15 Q. Did you go anywhere else? Did you go to  
16 any food service facilities?

17 A. No.

18 Q. I will hand you -- and I am not going to  
19 mark it as an Exhibit. It's something that your  
20 office produced to me. Are these competitors of  
21 yours that you looked at their products back at the  
22 time?

23 A. I expect that we would have.

24 Q. Bates stamp number CRPF 07614?

PTO-003415

1 A. Yes.

2 Q. Those people you are looking at their  
3 product, it's Boar's Head, Dietz & Watson, Hormel,  
4 Jennie-O, Perdue, Sara Lee, Willowbrook Farms,  
5 Butterball, Healthy Choice -- well, those are your  
6 three. Peter Eckrich, Healthy Choice and  
7 Butterball are yours, right?

8 A. Yes.

9 Q. Does that help refresh as to the  
10 competitors you looked at?

11 A. I couldn't tell you that.

12 Q. That's something better left for Sue  
13 Burns?

14 A. Yes.

15 Q. Do you remember looking at those  
16 products behind the deli counter?

17 A. I know in our area we have Sara Lee, and  
18 I know that we have some Hormel product.

19 Q. Did you look at the Hormel product?

20 A. Yes.

21 Q. None of it had this golden brown color?

22 A. No. I believe the Hormel product was a  
23 smoked product.

24 Q. Is it your testimony that if you have a

1 A. I don't know.

2 Q. Have you seen that product?

3 A. I have not.

4 Q. Did you look at it back in '98, any of  
5 their product?

6 A. We looked at Jennie-O product. We did  
7 not find a golden brown product.

8 Q. Is it your testimony today that if it's  
9 not a golden brown product, it doesn't fall within  
10 your patent?

11 MR. SCHROEDER: Objection, lacks foundation,  
12 beyond the competency of the witness and outside  
13 the 30(b)(6) notice.

14 BY MR. CASTRO:

15 Q. If you can answer it.

16 A. That would be my opinion.

17 Q. Okay. What products of other companies  
18 are competitive with the products produced by the  
19 '027 Patent?

20 A. Excuse me, ask that again.

21 Q. Yes. What products are competitive with  
22 your --

23 MR. SCHROEDER: I don't believe that that  
24 question falls within any of the areas which this

PTO-003417

1 experience, that's how you smoke part of your  
2 product, right?

3 A. We smoke products in batch houses, yes.

4 Q. How long does it take to smoke products  
5 in batch houses?

6 A. It depends on the house that we use, but  
7 anywhere from 20 minutes to two hours, three hours.

8 Q. Can you smoke product using your  
9 process?

10 A. I know in the background of the  
11 invention, we describe the processes that are  
12 in-line that smoke products and produce smoked  
13 products.

14 Q. My question is can you smoke product  
15 using your process?

16 A. I don't know that you can get a golden  
17 brown smoked product. I don't know. I just don't  
18 know that. I suppose with the right combination of  
19 ingredients, maybe you could.

20 Q. If a competitor smoked the product using  
21 the process as set forth in the patent, would that  
22 be -- would that fall within the claims of the  
23 patent?

24 A. If they're using a pyrolysis product on

PTO-003418

1 A. Yes.

2 Q. Would it have been someone the marketing  
3 people would have looked at to view their color?

4 A. It's possible.

5 Q. Okay. When was the company first able  
6 to achieve a golden brown color on product?

7 A. I can't tell you exactly. We didn't  
8 measure those colors in 1989 and '90. It's  
9 possible that we could have achieved those colors  
10 then in testing that was done. It's possible that  
11 we could have achieved those colors anywhere along  
12 the way. We didn't measure those until 1997.

13 Q. It's possible you could have achieved  
14 the golden brown color with ovens provided by  
15 Stein, correct?

16 A. Yes.

17 Q. It's possible you could have achieved  
18 the golden brown color with ovens provided by  
19 Koppens, correct?

20 A. Yes.

21 Q. It's possible you could have achieved  
22 the golden brown color with ovens provided by  
23 Unitherm, correct?

24 A. Yes.

PTO-003419

1 Q. You didn't measure with this Hunter  
2 wand, is that why you don't know whether you  
3 achieved the golden brown color?

4 A. Yes.

5 Q. What did you buy from Convenience Food  
6 Group in 1998 or '99? Did you acquire an oven from  
7 Convenience Food Group?

8 A. In 1998, we purchased a Koppens oven.

9 Q. So they make the Koppens oven?

10 A. Yes.

11 Q. And that's still in production today?

12 A. Yes.

13 Q. It's still operating?

14 A. Yes.

15 Q. Do you still produce a cooked in the bag  
16 turkey product, a white turkey product?

17 A. I don't know exactly all the products  
18 that are produced in the Longmont facility, but  
19 there may be some white products that are produced  
20 there. I don't believe that we produce any of  
21 those in Jonesboro.

22 Q. Well, when you're here testifying today,  
23 you're talking about all the facilities at Conagra,  
24 aren't you? I want to make sure we're clear.

PTO-003420



1 what, year or two, that there were other companies  
2 using the Unitherm system? Did Gary tell you that?

3 A. No.

4 Q. Did you ask him?

5 A. No.

6 Q. Prior to filing of the patent in May of  
7 1998, wasn't Conagra informed of other companies  
8 that were using the process that Unitherm  
9 demonstrated in '98?

10 MR. SCHROEDER: Objection, assumes a fact not  
11 in evidence and misleading.

12 BY MR. CASTRO:

13 Q. No, did Conagra inform -- did Unitherm  
14 inform you prior to filing of the '027 Patent that  
15 there were other companies using the process that  
16 was demonstrated at their facility in February of  
17 1998?

18 A. No.

19 Q. Did they inform anyone at Conagra?

20 A. Not that I'm aware of.

21 Q. Did you disclose any trade secrets to  
22 Unitherm when you were at their facility in  
23 February of 1998?

24 A. To the extent that we ran the tests to

1 achieve our targeted color, the color objective,  
2 that color objective for us and the fact that we  
3 were contemplating that was a trade secret.

4 Q. Did you tell them that?

5 A. Yes.

6 Q. Did you have them sign a confidentiality  
7 agreement?

8 A. No.

9 Q. Don't you normally have vendors, third  
10 parties, sign confidentiality agreements prior to  
11 disclosing trade secrets?

12 A. We normally leave that up to our  
13 purchasing group to have confidentiality agreements  
14 on file. That was a procedure prior to that.

15 Q. You knew that there was no  
16 confidentiality agreement on file with Unitherm  
17 prior to the visit in February of 1998, didn't you?

18 A. No, I did not.

19 Q. Didn't Prem?

20 A. No.

21 Q. How do you know that?

22 A. We talked about it.

23 Q. Did you? Before you went or after?

24 A. After.